Application No.: 10/001,289

Office Action Dated: September 28, 2007

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method for loading hierarchical data organized in a hierarchical arrangement into a first relational table comprising:

identifying a first node within the hierarchical data organized in a hierarchical arrangement corresponding to a first column in the first relational table and a second node associated with the first node corresponding to data to be stored in a row of the first relational table at a location corresponding to the first column;

storing the data from the <u>first second</u> node in a record in a first buffer associated with the first relational table <u>after determining that the first node within the hierarchical data is</u> associated with the first relational table;

identifying a third node within the hierarchical data organized in a hierarchical arrangement corresponding to a first column in a second relational table and fourth node associated with the third node corresponding to data to be stored in a row of the second relational table;

storing the data from the <u>third fourth</u> node in a record in a second buffer associated with the second relational table <u>when the third node within the data organized in a hierarchical arrangement corresponds to a second relational table; and</u>

copying the record from the first buffer to the first relational table and the record from the second buffer to the second relational table <u>as each record is determined to be complete</u>.

- 2. (Original) The method as recited in claim 1 wherein the relational table is part of a relational database.
- 3. (Currently amended) The method as recited in claim 1 wherein the hierarchical data organized in a hierarchical arrangement is XML data.
- 4. (Currently amended) The method as recited in claim 1 wherein the hierarchical data organized in a hierarchical arrangement is identified to correspond to a column in the relational table by way of a hierarchical schema.
 - 5. (Canceled)

Application No.: 10/001,289

Office Action Dated: September 28, 2007

6. (Canceled)

7. (Canceled)

8. (Currently amended) The method as recited in claim [[7]]1 further comprising: storing the record in the second buffer associated with the second relational table when a child node of the third node indicates that the hierarchical data organized in a hierarchical arrangement comprises data associated with a column in the second relational table; and

copying the record from the second buffer to the second relational table.

- 9. (Currently amended) The method as recited in claim [[8]] 1 further comprising copying the record from the first buffer to the first relational table substantially in parallel to copying the record from the second buffer to the second relational table.
- 10. (Original) The method recited in claim 9 wherein the first relational table has a relational relationship with the second relational table.
- 11. (Original) The method as recited in claim 1 wherein the first buffer comprises a disk file.
- 12. (Currently amended) The method as recited in claim 1 wherein the hierarchical data organized in a hierarchical arrangement comprises an XML document.
 - 13. (Canceled)
- 14. (Currently amended) A method for loading hierarchical data organized in a hierarchical arrangement into at least two different relational tables, comprising:

receiving a schema describing a relationship of nodes in the hierarchical data organized in a hierarchical arrangement to at least one column in each of the at least two different relational tables;

mapping the hierarchical data organized in a hierarchical arrangement to the at least one column in each of the at least two different relational tables based on the schema and creating in at least two different files where each file is associated with one of at least two different relational tables records from the hierarchical data organized in a hierarchical

Application No.: 10/001,289

Office Action Dated: September 28, 2007

<u>arrangement</u> from nodes identified as data to be stored in the at least one column in each of the at least two different relational tables; and

streaming the records into the at least two different relational tables by inserting the records from the at least two different files into corresponding ones of the at least two different relational tables <u>as each record is determined to be complete</u>.

15. (Previously presented) The method as recited in claim 14 further comprising creating a buffer for each of the at least two relational tables wherein the records are stored before being streamed into the at least two different relational tables.

- 16. (Canceled)
- 17. (Original) The method as recited in claim 14 wherein the hierarchical data organized in a hierarchical arrangement is not size constrained.
- 18. (Original) The method as recited in claim 14 wherein the hierarchical data organized in a hierarchical arrangement comprises an XML document.
- 19. (Original) The method as recited in claim 14 wherein the schema comprises an XML schema.
- 20. (Previously presented) The method as recited in claim 14 wherein the at least two different tables have a relational relationship.
- 21. (Previously presented) The method as recited in claim 20 wherein one of the at least one columns is a key field in one of the at least two different tables and foreign key in the other one of the at least two different tables, wherein the method further comprises populating records associated with the at least two different tables with the data associates with the one of the at least one columns.
- 22. (Previously presented) The method as recited in claim 14 further comprising streaming the record into the at least two different relational tables substantially in parallel.
- 23. (Original) The method as recited in claim 14 wherein the schema is received by way of a network connection.

Application No.: 10/001,289

Office Action Dated: September 28, 2007

24. (Canceled)

25. (Currently amended) A system for loading hierarchical data organized in a hierarchical arrangement into at least two different relational tables, comprising:

instructions for receiving a schema describing a relationship of nodes in the hierarchical data <u>organized in a hierarchical arrangement</u> to at least one column in each of the at least two different relational tables;

instructions for mapping the hierarchical data organized in a hierarchical arrangement to the at least one column in each of the at least two different relational tables based on the schema and creating at least two different files where each file is associated with one of at least two different relational tables records from the hierarchical data organized in a hierarchical arrangement from nodes associated identified as data to be stored in the at least one column in each of the at least two different relational tables; and

instructions for streaming the records into the at least two different relational tables by inserting the records from the at least two different files into corresponding ones of the at least two different relational tables as each record is determined to be complete.

- 26. (Previously presented) The system as recited in claim 25 further comprising instructions for creating a buffer for each of the at least two different relational tables wherein the records are stored before being streamed into the at least two different relational tables.
- 27. (Original) The system as recited in claim 26 wherein the buffer comprises a file.
- 28. (Currently amended) The system as recited in claim 25 wherein the hierarchical data organized in a hierarchical arrangement comprises an XML document.
- 29. (Original) The system as recited in claim 25 wherein the schema comprises an XML schema.
- 30. (Original) The system as recited in claim 25 wherein the at least two tables have a relational relationship.

Application No.: 10/001,289

Office Action Dated: September 28, 2007

31. (Original) The system as recited in claim 25 wherein one of the at least one columns is a key field in one of the at least two tables and foreign key in the other one of the at least two tables, wherein the system further comprises instructions for populating records associated with the at least two tables with the data associates with the one of the at least one columns.

32. (Original) The system as recited in claim 25 further comprising instructions for streaming the record into the at least two relational tables substantially in parallel.